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PHOTOGRAPHIC INTELLIGENCE REPORT

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SITE OF REPORTED PLOWSHARE PROJECT
KHANTAYKA RIVER, USSR

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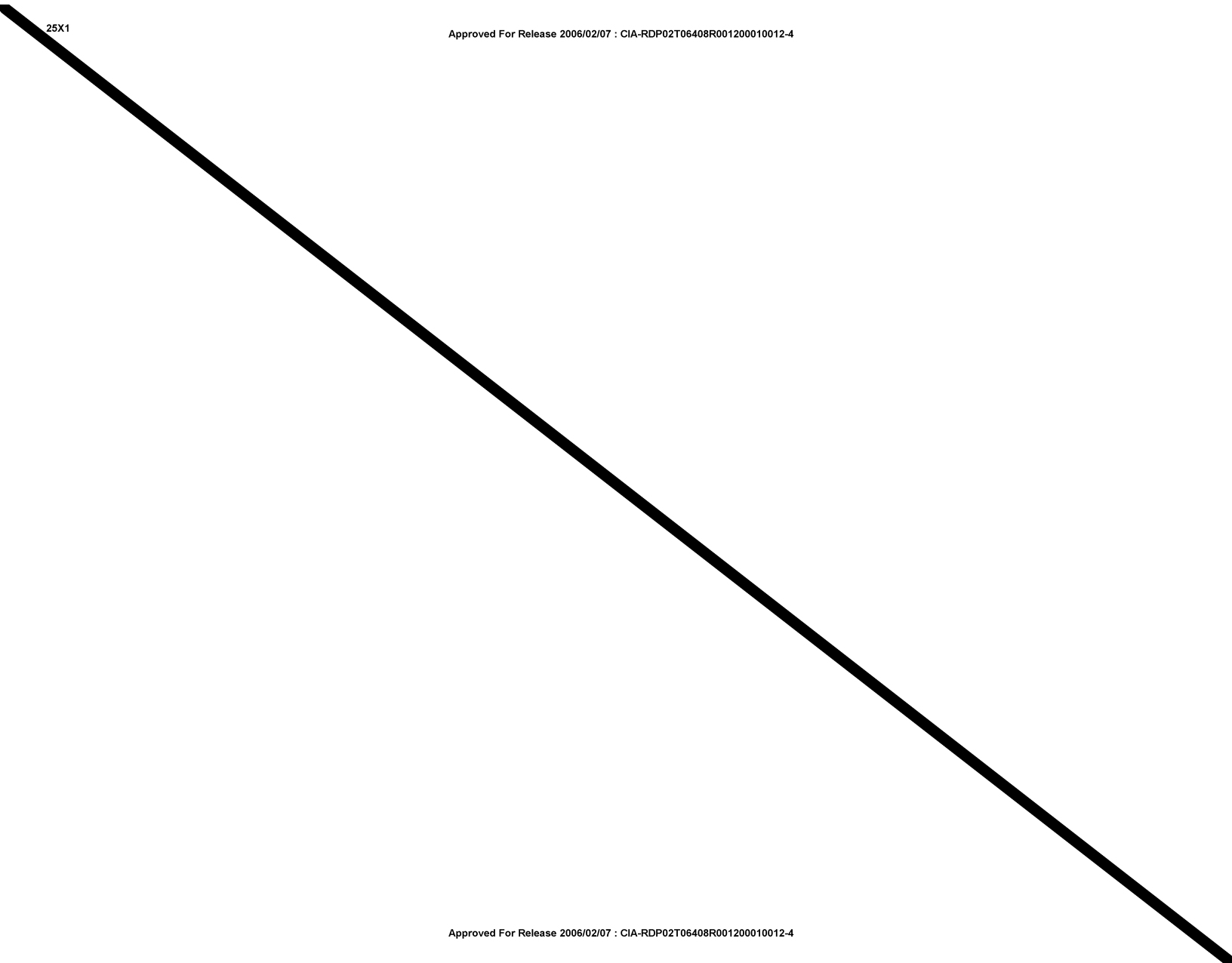

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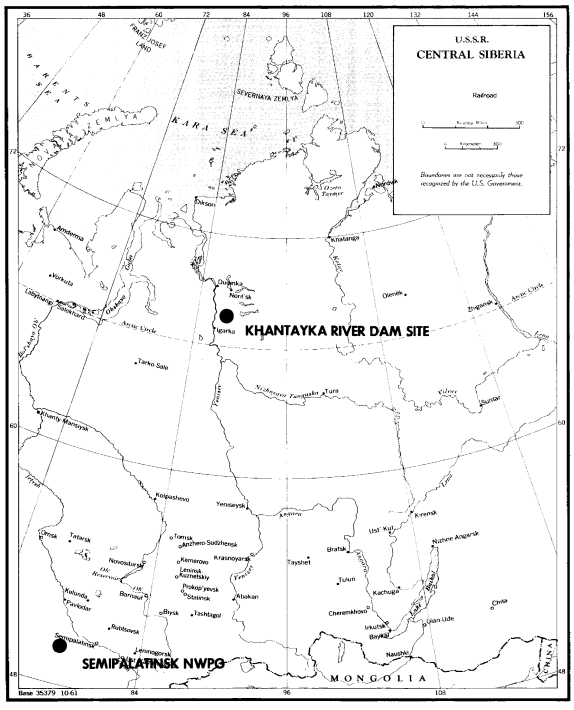


FIGURE 1

SITE OF REPORTED PLOWSHARE PROJECT KHANTAYKA RIVER, USSR

INTRODUCTION

[redacted] a plan to carry out a PLOWSHARE experiment in connection with the Khantayka River Hydroelectric Power Project at 68-05N 87-43E. 1/ The exact manner in which this PLOWSHARE explosion might be utilized is not known; it could be used to dam the river at the construction site, to divert water to the Khantayka farther upstream, or perhaps to perform some other similar function. 25X1

The dam project is located at a natural gorge in the Khantayka River one nautical mile (nm) downstream from the junction of the Khantayka and one of its tributaries, the Kulyumbe. It is approximately 30 nm from the confluence of the Khantayka and Yenisey Rivers.

The site has been covered by only one clear post-1964 mission [redacted] which was of fair quality. 25X1

All measurements have been made by the NPIC Technical Intelligence Division with the exception of those of the landing strip and the cleared rectangular area. These measurements were made by the CIA/IAD project analysts. The NPIC/TID measurements are considered to be accurate within ± 10 feet for horizontal distances and ± 20 feet for vertical distances.

DESCRIPTION

In [redacted] the only evidence of habitation at the project site was a small settlement of 22 randomly arranged buildings, possibly a survey workers' camp, near the west end of the gorge on the south side of the river. [redacted] there were approximately 30 additional small buildings/tents at the camp; also, observed for the first time, were a permanent housing area, a construction support area, a small secured explosives storage area, and a landing strip, all under construction except for the explosives storage area (Figures 3 and 4). 25X1 25X1

In [redacted] the housing area was still under construction. It is located 0.5 nm north of the gorge and contains approximately 20 2-story workers' apartments and a like number of support buildings. The river-served construction support area is situated on the north side of the Khantayka River about 0.5 nm west 25X1

of the gorge. The latter area appeared to be under expansion on this latest coverage and consisted of several probable storage buildings and considerable ground scarring. The workers' survey camp cannot be clearly distinguished on the poor quality photography of [redacted].

At least one barge and two small boats were observed tied up near the construction support area on the [redacted] coverage.

The NW/SE graded earth landing strip approximately 3,300 feet by 300 feet (with an additional 2,300-foot overrun at the NW end) is located 3 nm west of the gorge on the south side of the Khantayka River. It is connected by road to the dam site and the support areas.

Construction of the actual dam had not begun in [redacted] however, preliminary road-building and excavation were in progress adjacent to the gorge, chiefly on its south side. A bridge crosses the gorge near the west end. Measurements of the gorge (width, length, and depth) are shown in Figure 4.

A winter road, generally paralleling the south bank of the Khantayka River, has been constructed from the dam site westward to the Yenisey River. A similar road leads northward from the housing area for approximately 3.5 nm, at which point it abruptly terminates for no apparent reason; it does not appear to have changed [redacted] A cleared rectangular area, approximately 1,800 feet by 800 feet, is located 1 nm north of the housing area along the road leading to the north.

Since [redacted] a second secured explosives storage area has been built; it is located 1 nm WNW of the housing area.

SEARCH OF KHANTAYKA HEADWATERS

Figure 2 shows the water shed of the Khantayka River extending from the western half of Khantayskoye Lake to the Yenisey River. It also defines the limits of the photo coverage of the area. There has been no post-1964 coverage of the Khantayka River upstream beyond a point approximately 2 nm east of the dam site. Only one clear mission since [redacted] covered any portion of the Khantayka headwaters, and it included only that part of the watershed westward from the edge of the Putorana Mountains and did not include Khantayskoye Lake, one of the chief sources of the Khantayka River. A search of the 1962 and 1964 coverage failed to reveal any activity possibly associated with a water diversion project.

COMPARISON OF THE KHANTAYKA DAM SITE WITH THE SITE OF THE 15 JANUARY 1965 NUCLEAR CRATER AT SEMIPALATINSK

The site of the Khantayka Hydroelectric Power Project, located in northern central Siberia, is in a permafrost region of tundra and evergreen forests. The dam site appears to be situated in an area generally of Ordovician surface sediments; however, the gorge is bisected by an intrusive trap ridge trending NNE/SSW which undoubtedly accounts for the rapids within the gorge and probably explains the presence of the gorge itself at this location (Figure 5). The low ridge formed by the elongated and relatively narrow mass of more resistant intrusive rock has resulted in a natural barrier which perhaps may be utilized in containing the reservoir to be created by the dam. The elevation of the site of the dam is approximately 150 feet above sea level. Except for its headwaters, the Khantayka River has a width generally of several hundred feet and apparently supports a large volume of water-flow. The large size of the river is further evidenced by the fact that, according to collateral information, its river bed from the dam site to the Yenisey was to have been deepened in 1963 to make the river navigable throughout its normal 107-day season. 2/

The site of the 15 January 1965 nuclear crater at Semipalatinsk is located in a semi-arid alluvial area where the southern edge of the Kulundinskaya Steppe merges with the foothills of the Chingiz-tau mountain range. The crater itself is in the slightly meandering stream bed of the Shagan River, a tributary of the Irtysh, approximately 1 nm below the junction of the Shagan and the Ashchisu Rivers (Figures 5 and 6). The Shagan River at this point appears to flow along an alluvium-filled contact zone between carboniferous sediments to the west and eroded granite intrusives and metamorphic outcrops to the east. The elevation of the site of the crater is approximately 1,100 feet above sea level. As a result of the terrain upheaval surrounding the crater, a small lake has been created that extends approximately 2 nm upstream. The volume of water flowing in the two rivers, the Shagan and the Ashchisu, is meager and typical of that of small rivers in a semi-desert area; large flows would probably be seasonal and short in duration.

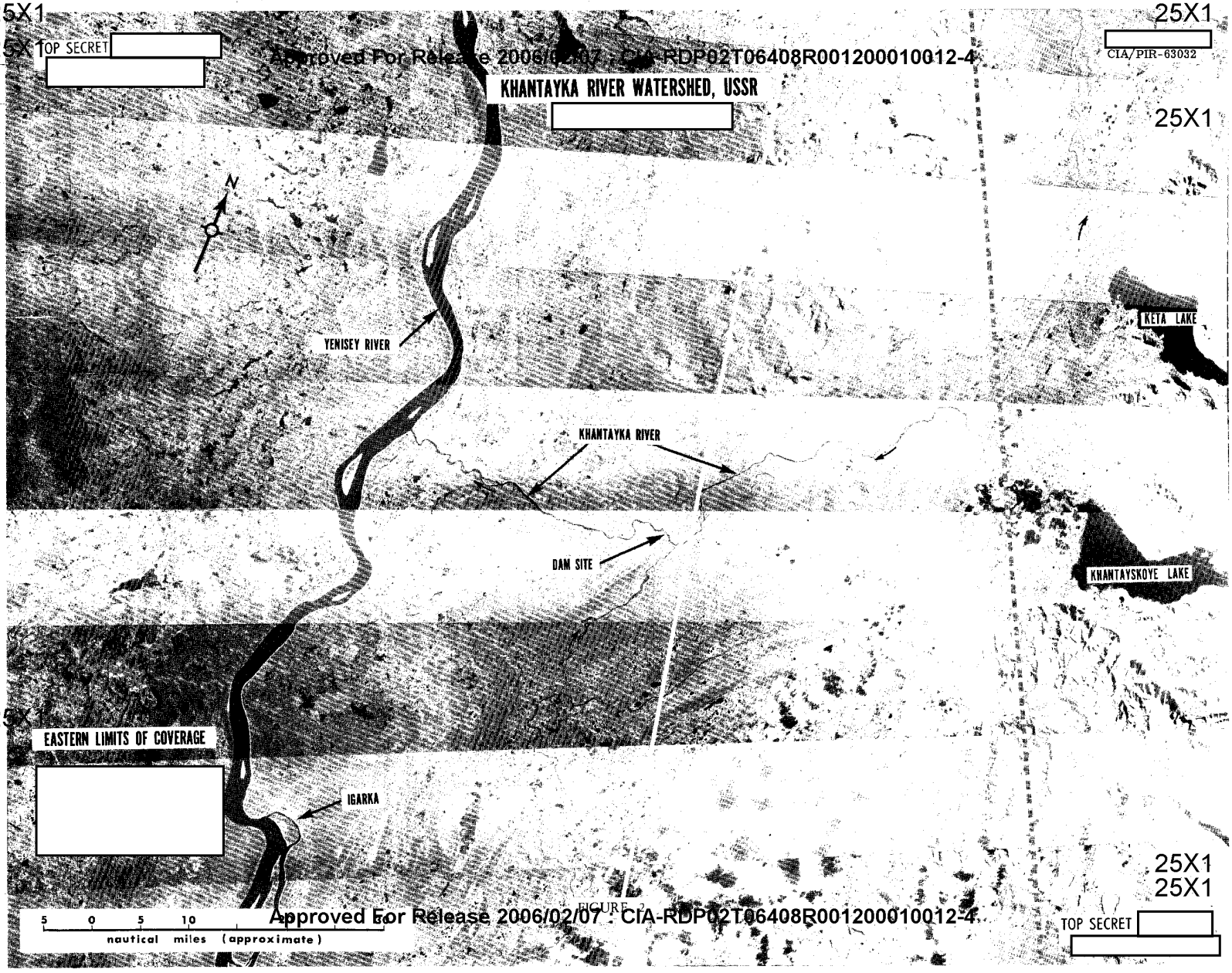
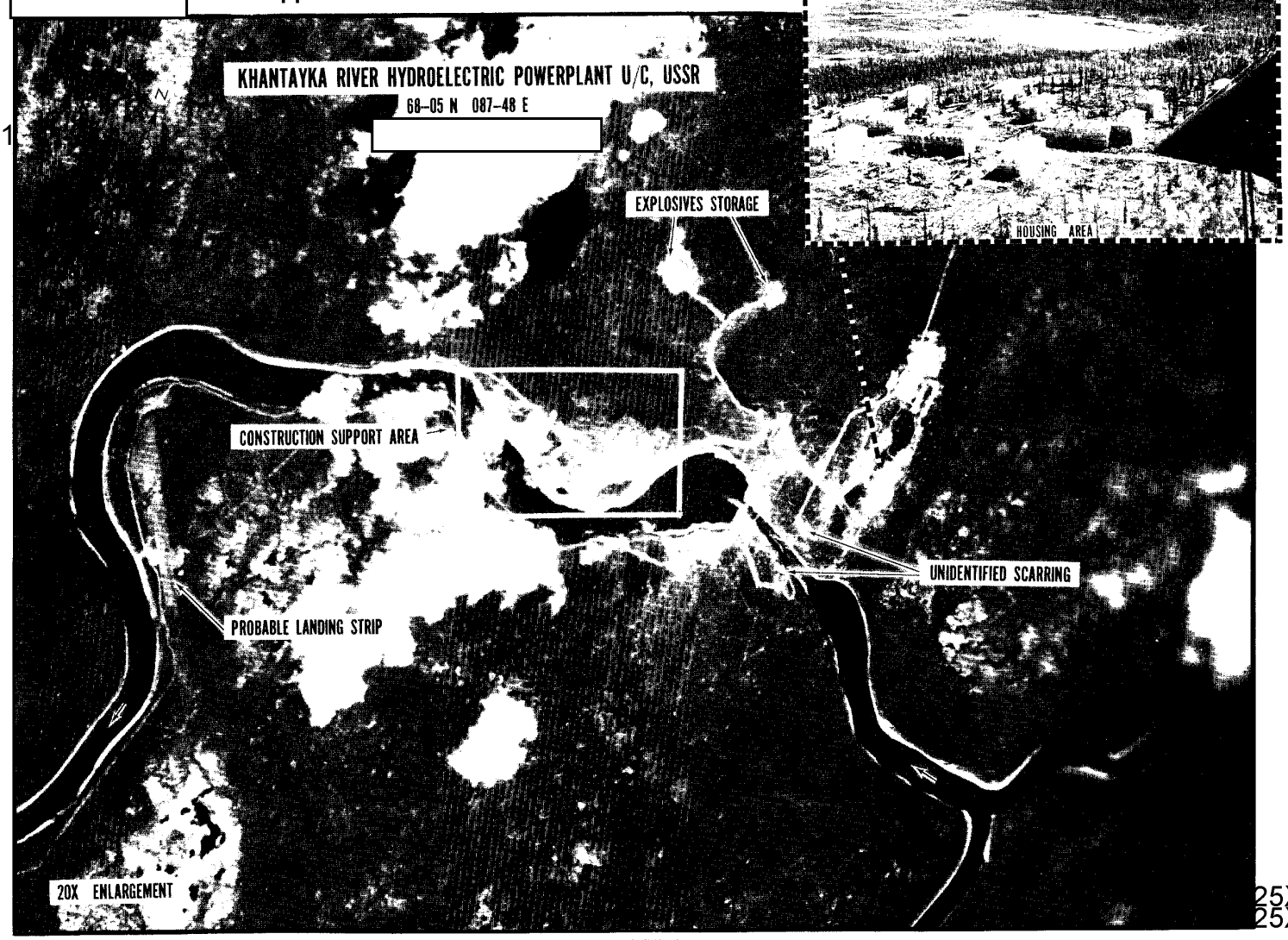


FIGURE 1



GORGE DIMENSIONS

POINT	WIDTH	DEPTH	LENGTH
A to C	--	---	1,250'
A	265	60	---
B	290'	65'	---
C	235'	---	---
D	---	45	---

FIGURE 4

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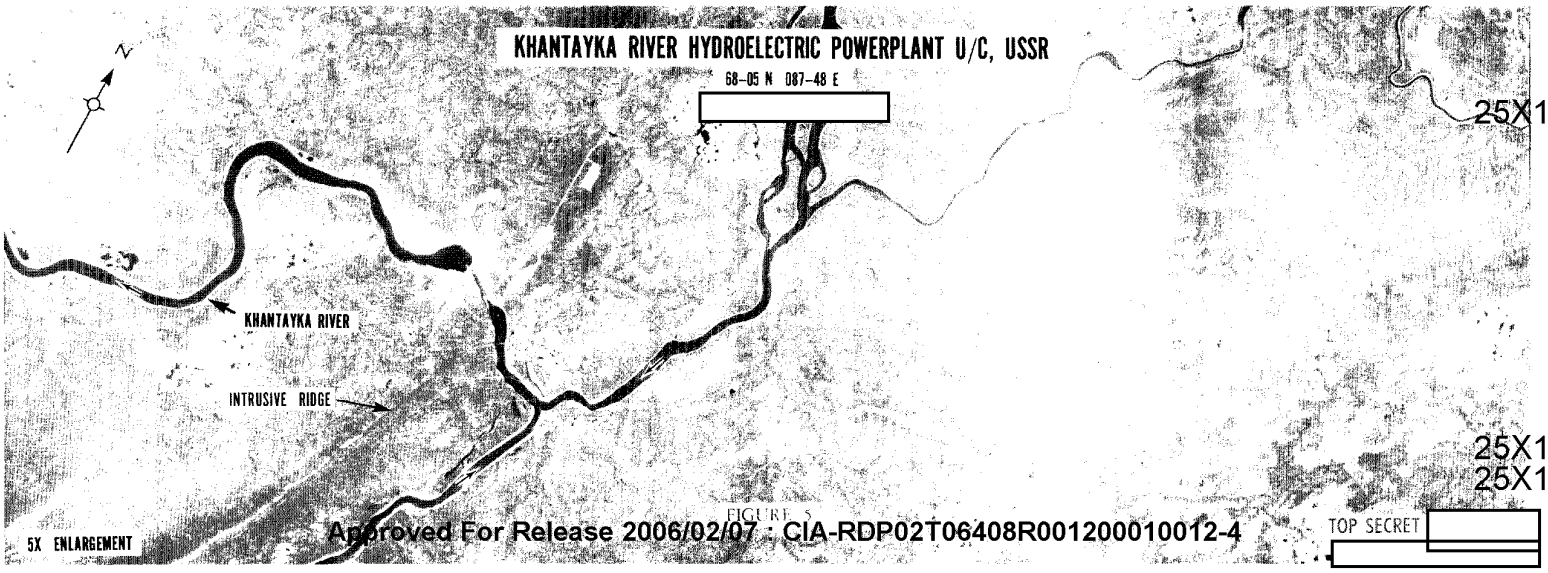
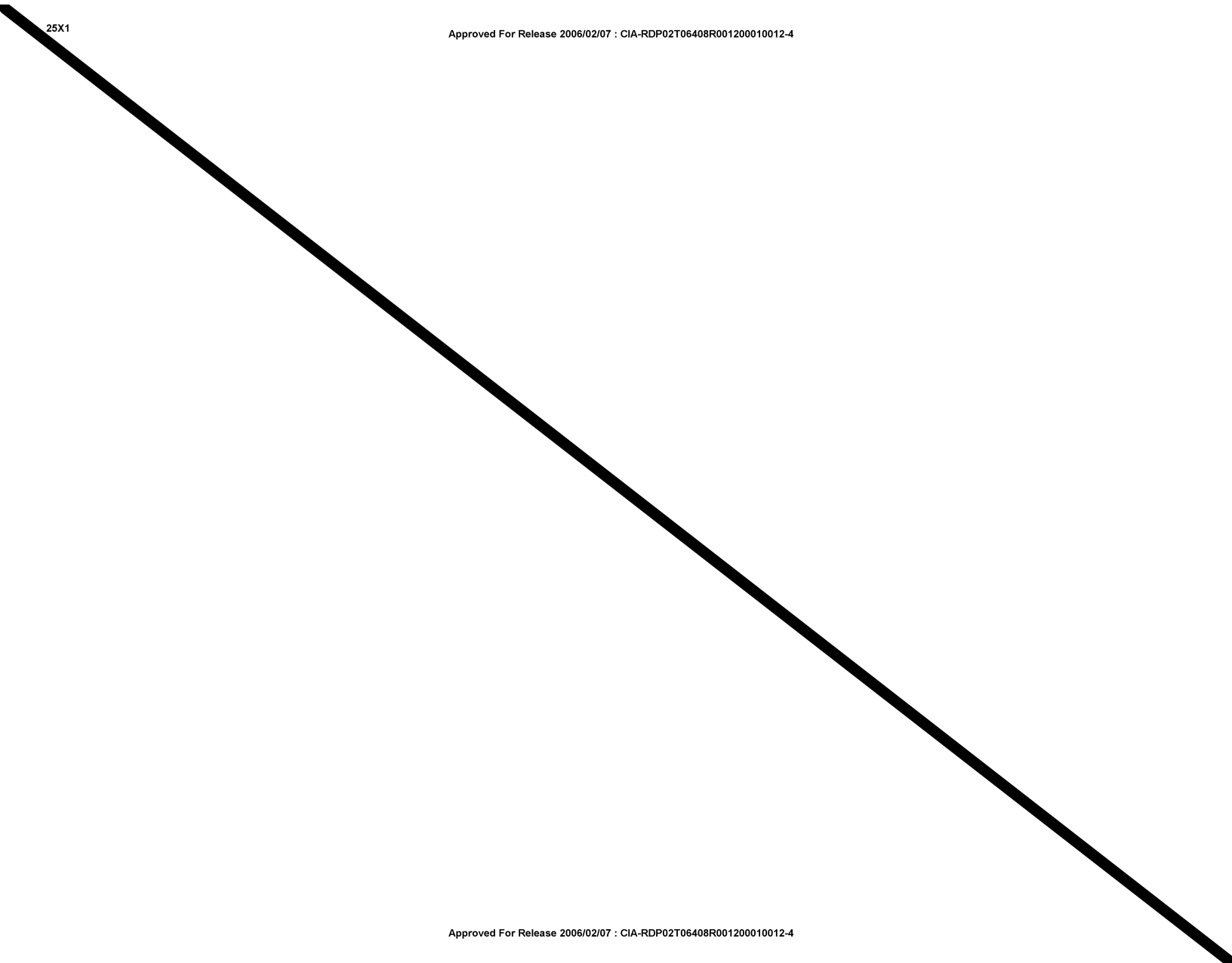


FIGURE 5



REFERENCES

[redacted] 25X1

PHOTOGRAPHY (GROUND)

Ground Photo CIA 1024493. CONFIDENTIAL
Ground Photo CIA 1024494. CONFIDENTIAL

MAPS AND CHARTS

1. ACIC. USAF Operational Navigation Chart, ONC-C-4, Scale 1:1,000,000, 2nd classified ed., January 1963. (CONFIDENTIAL)

2. ACIC. USAF Operational Navigation Chart, ONC-E-6, Scale 1:1,000,000, 1st classified ed., December 1961. (CONFIDENTIAL)

3. AMS. Series DESPA-1, Sheet NR 45,46-10, Scale 1:250,000, Edition 1, September 1962. (TOP SECRET [redacted] 25X1

4. The Ministry of Geology of the USSR. The Geological Map of the USSR, List Numbers 10 and 15, Scale 1:2,500,000, 1956. (UNCLASSIFIED)

DOCUMENTS

[redacted] 25X1

REQUIREMENT NUMBER

C-SI5-83,145

CIA/IAD PROJECT NUMBER

30550-6

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Approved For Release 2006/02/07 : CIA-RDP02T06408R001200010012-4